

31. (New) A method for the *in vivo* detection of fibrin in a patient, said method comprising the steps of:

administering to said patient an effective amount of a detectable reagent comprising discrete particles dispersed in a pharmaceutically or veterinarily acceptable carrier, diluent, excipient, adjuvant or any combination thereof, wherein at least some of said particles comprise a detectable marker encased in at least two layers of carbon;

binding at least some of said particles to said fibrin; and

detecting the presence of said detectable marker in said patient.

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32. (New) A method for the detection of fibrin in a fibrin-containing source, said method comprising the steps of:

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supplying to said fibrin-containing source a detectable reagent comprising discrete particles dispersed in a carrier, diluent, excipient, adjuvant or any combination thereof, wherein at least some of said particles comprise a detectable marker encased in at least two layers of carbon;

binding at least some of said particles to said fibrin; and

detecting the presence of said detectable marker in said fibrin-containing source.

33. (New) The method according to claim 31, wherein each of said particles is hydrophilic and comprises said detectable marker encased in from 2 to 10 layers of graphitic carbon.

34. (New) The method according to claim 31, wherein the carrier is an aqueous solution.

35. (New) The method according to claim 34, wherein the aqueous solution is 5% glucose in water.
36. (New) The method according to claim 32, wherein each of discrete particles has a cross section of from about 5 nm to about 30 nm.
37. (New) The method according to claim 36, wherein said reagent is administered in an amount such that the dose comprises up to about 100 ng of said particles.
38. (New) The method according to claim 36, wherein said detectable marker is detectable by radiochemical techniques, magnetic resonance imaging or is optically detectable.
39. (New) The method according to claim 36, wherein said detectable marker is selected from the group consisting of Gd, Au or radionuclides which emit gamma rays.
40. (New) The method according to claim 39, wherein said detectable marker is ^{99m}Tc .
41. (New) A detectable reagent for use in *in vivo* or *in vitro* detection of fibrin, said detectable reagent comprising discrete particles dispersed in a carrier, diluent, excipient, adjuvant or any combination thereof, wherein at least some of said particles comprise a detectable marker encased in at least two layers of carbon, wherein at least some of said particles preferentially bind to fibrin over other blood plasma proteins.
42. (New) The detectable reagent according to claim 41, wherein each of said particles comprises a detectable marker encased in from 2 to 10 layers of graphitic carbon, at least an outer layer of said layers being chemically modified to enable a stable chemical association of the layer with aqueous solution.

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43. (New) The detectable reagent according to claim 41, wherein the outer layer comprises hydrolyzed graphite.
44. (New) The detectable reagent according to claim 41, wherein the carrier is an aqueous solution.
45. (New) The detectable reagent according to claim 44, wherein the aqueous solution is 5% glucose in water.
46. (New) The detectable reagent according to claim 41, wherein each of said particles has a cross-section of from about 5 nm to about 30 nm.
47. (New) The detectable reagent according to claim 41, wherein the detectable marker is detectable by radiometric techniques, magnetic resonance imaging or is optically detectable.
48. (New) The detectable reagent according to claim 41, wherein said detectable marker is selected from the group consisting of radionuclides which emit gamma rays.
49. (New) The detectable reagent according to claim 48, wherein said detectable marker is ^{99m}Tc .

50. (New) The method of targeting a drug to a localized fibrin site *in vivo*, the method comprising the steps of:

administering to a patient an effective amount of a reagent comprising discrete particles dispersed in a veterinarily or pharmaceutically acceptable carrier, diluent, excipient, adjuvant or any combination thereof, wherein at least some of said particles

comprise at least two layers of carbon and at least some particles have coupled thereto a drug to be targeted to the localized fibrin site; and

binding at least some of said particles to said localized fibrin site;

whereby said drug is targeted to said fibrin site.

51. (New) The method according to claim 50, wherein said drug to be targeted is an anti-thrombotic or anti-cancer drug.
52. (New) The method according to claim 50, wherein each of said particles comprises a detectable marker enclosed in said layers of carbon.
53. (New) The method according to claim 42, wherein each of said particles of hydrophilic and comprise said detectable marker encased in from 2 to 10 layers of graphitic carbon.
54. (New) The method according to claim 32, wherein the carrier is an aqueous solution.
55. (New) The method according to claim 54, wherein the aqueous solution is 5% glucose in water.
56. (New) The method according to claim 32, wherein each of said discrete particles has a cross-section of from about 5 nm to about 30 nm.
57. (New) The method according to claim 32, wherein said reagent is administered in an amount such that the dose comprises up to about 100 ng of said particles.
58. (New) The method according to claim 32, wherein said detectable marker is detectable by radiochemical techniques, magnetic resonance imaging or is optically detectable.

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59. (New) The method according to claim 32, wherein said detectable marker is selected from the group consisting of radionuclides which emit gamma rays.
60. (New) The method according to claim 59, wherein said detectable marker is ^{99m}Tc .
61. (New) The method according to claim 31, wherein a surface of said particles is coated with a surfactant coating that increases the binding efficiency of said particles with fibrin.
62. (New) The method according to claim 32, wherein a surface of said particles is coated with a surfactant coating that increases the binding efficiency of said particles with fibrin.
63. (New) The detectable reagent of claim 41, wherein a surface of said particles is coated with a surfactant coating that increases the binding efficiency of said particles with fibrin.
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REMARKS

Claims 1-30 have been canceled without prejudice and replaced by new claims 31-63, which more particularly point out and distinctly claim the present invention. Support for the new claims is found in the as-filed claims and in the as-filed Specification on page 6, line 29, to page 7, line 2, and in Example 16. None of the amendments made herein constitutes the addition of new matter.

Election/Restriction

The current Office Action indicates that the lack of unity requirement has been withdrawn.

Priority

Applicants will provide a certified copy of the priority application in accordance with the statutory requirements.